

**GOVERNMENT OF INDIA
SPACE
LOK SABHA**

STARRED QUESTION NO:548

ANSWERED ON:25.04.2001

LAUNCHING OF GSLV

MANIKRAO HODLYA GAVIT;NARESH KUMAR PUGLIA

Will the Minister of SPACE be pleased to state:

- (a) whether India's first GSLV failed to lift off due to some technical snag recently;
- (b) if so, whether the Space Research Programme has been badly hit due to failure of the launching of GSLV;
- (c) whether any preliminary investigations have been conducted into the causes of failure of launching of GSLV;
- (d) if so, the details thereof;
- (e) the total losses suffered by the Government on this count;
- (f) whether the Government are considering to re-launch the GSLV;
- (g) if so, time-frame worked out therefor; and
- (h) the steps taken by the Government to check recurrence of such accidents in future?

Answer

MINISTER OF STATE IN THE DEPARTMENT OF SPACE (SMT. VASUNDHARA RAJE):

(a),(b),(c),(d),(e),(f),(g)&(h) A statement is laid on the Table of the Lok Sabha.

STATEMENT LAID ON THE TABLE OF THE LOK SABHA IN REPLY TO QUESTIONS (a), (b), (c), (d), (e), (f), (g) AND (h) OF STARRED QUESTION NO. 548 REGARDING 'LAUNCHING OF GSLV' BY SHRI MANIKRAO HODLYA GAVIT AND SHRI NARESH KUMAR PUGLIA FOR ANSWER ON APRIL 25, 2001.

(a) The first launch attempt was aborted one second before the lift-off on March 28, 2001 by the Automatic Launch Processing System (ALS) after detecting that one of the strap-on boosters did not develop the required thrust. Subsequently GSLV was successfully launched on April 18, 2001.

(b) The Space Programme has not been affected by the launch hold. On the other hand the experience gained through the safe abort and fast recovery is invaluable as witnessed by the successful launch.

(c) A detailed analysis has been carried out about reasons for the strap-on motor developing insufficient thrust.

(d) The reason for one of the strap-on boosters not developing the required thrust is due to a defective plumbing in the oxidiser flow line of the engine, which had escaped detection during testing. This resulted in reduced flow of oxidiser to the engine. The anomalous engine was replaced with a standby engine. All the other systems of the vehicle were found to be healthy. Subsequently GSLV was successfully launched on April 18, 2001.

(e) Provision for launch abort is part of the launch countdown. All the vehicle systems were healthy and reusable. The disassembled engine also can be reused after refurbishment. The re-launch attempt called for marginal additional network hiring charges, propellants and gases, which are provided for. It is important to note that the experience, gained through the safe abort and fast recovery, is invaluable. The additional expenditure involved would not be significant.

(f)&(g) The GSLV-D1 was successfully launched on April 18, 2001.

(h) While the quality control procedures had been validated through realisation of several engines, it is proposed to further strengthen them based on the present experience.